

generating parameter values for transmission equipment on respective links to serve as coarse grain settings of the respective transmission equipment; and

sending the parameter values to respective transmission equipment.

30. A method as claimed in claim 29 further comprising the step of effecting the reconfiguration of the optical transmission components to establish the communications channel.
31. A system for adaptively controlling communications channels in an agile optical network, the system comprising a wavelength and route manager (WRM) that determines a channel to be setup to satisfy a request for service between two network elements (A and B), using a route selection algorithm using at least one generic rule to evaluate a given set of routes between A and B, in order to identify a route; a route-based wavelength selector adapted to select at least one available wavelength subject to a constraint that the at least one wavelength traces the selected route; and a constraint-based route validator that: verifies a viability of the at least one wavelength; and effects the set up of the communications channel between A and B, if the viability is verified.